

We claim:

1. A system for providing navigational instructions, the system comprising:

a communication port for receiving signals representing location information including a starting point and a destination point, and for transmitting the navigational instructions;

a storage device having stored therein geographical information, photographic information, route processing instructions and photograph matching instructions, the photographic information including representations of photographs of actual geographic locations and the photograph matching instructions being instructions for matching a particular photograph with a corresponding geographic location; and

a processor, connected to said storage device and communicating therewith, for processing the location information and the geographical information in accordance with the route processing instructions to obtain a route for travel to the destination point, and for matching geographic locations along the route with representations of photographs thereof in accordance with the photograph matching instructions, thereby determining the navigational instructions for traveling the route including representations of photographs,

wherein said processor outputs the navigational instructions using said communication port, thereby providing a user with directions for traveling the route and a sequence of photographic representations of the geographic locations along the route.

2. A method of providing navigational instructions, the method comprising the steps of:

providing a first database having geographical information;

providing a second database having photographic information including representations of photographs of actual geographic locations;

matching each of the representations of photographs in the second database with the geographical information in the first database, so that a given photograph has associated therewith the geographical information regarding the location depicted in the photograph;

receiving location information including a starting point and a destination point;

processing the location information, the geographic information from the first database, and the photographic information from the second database to determine a route for travel to the destination point;

generating navigational instructions for traveling the route including representations of photographs; and

outputting the navigational instructions and the photographic representations of geographic locations in a sequence, thereby providing a user with a sequence of navigational instructions and photographic representations of geographic locations along the route.

3. A computer readable medium in which is stored a first database having geographical information, a second database having photographic information including representations of photographs of actual geographic locations, and computer readable code to be executed by a computer, said computer readable code performing a method of providing navigational instructions, the method comprising the steps of:

matching each of a plurality of representations of photographs in the second database with the geographical information in the first database, so that a particular photograph has associated therewith the geographical information regarding the location depicted in the photograph;

receiving location information including a starting point and a destination point;

processing the location information, the geographic information from the first database and the photographic information from the second database to determine a route for travel to the destination point;

generating navigational instructions for traveling the route including representations of photographs; and

outputting the navigational instructions and the photographic representations of geographic locations in a sequence, thereby providing a user with a sequence of navigational instructions and photographic representations of geographic locations along the route.

4. A system comprising:

a communication port for transmitting signals representing location information including a starting point and a destination point, and for receiving navigational instructions that include directions for following a route from the starting point to the destination point and representations of photographs of geographic locations along the route, the navigational instructions being received in a sequence in accordance with travel along the route;

an input device for inputting the location information;

an output device for outputting the navigational instructions; and

a processor for receiving the location information from said input device, for processing the location information for transmission by said communication port, and for processing the navigational instructions for output by said output device.

5. A system according to claim 4, wherein said system is installed in a vehicle.

6. A system according to claim 4, further comprising a device for automatically determining the starting point.

7. A method of providing navigational instructions, the method comprising the steps of:

inputting location information using an input device, the location information including a starting point and a destination point;

transmitting signals representing the location information using a communication port;

receiving the navigational instructions using the communication port, the navigational instructions including directions for following a route from the starting point to the destination point and representations of photographs of geographic locations along the route, the navigational instructions being received in a sequence in accordance with travel along the route; and

outputting the navigational instructions.

8. A method according to claim 7, wherein the navigational instructions are outputted to an operator of a vehicle.

9. A method according to claim 7, further comprising the step of automatically determining the starting point using a positioning device.

10. A computer readable medium in which is stored computer readable code to be executed by a computer, said computer readable code performing a method comprising the steps of:

receiving location information input from an input device, the location information including a starting point and a destination point;

transmitting signals representing the location information using a communication port;

receiving navigational instructions using the communication port, the navigational instructions including

directions for following a route from the starting point to the destination point and representations of photographs of geographic locations along the route, the navigational instructions being received in a sequence in accordance with travel along the route; and

outputting the navigational instructions.

11. A computer readable medium according to claim 10, wherein the navigational instructions are outputted to an operator of a vehicle.

12. A computer readable medium according to claim 10, wherein the starting point is automatically determined using a positioning device.

13. A system for providing navigational instructions, the system comprising:

a first device including

a first communication port for receiving signals representing location information including a starting point and a destination point and for transmitting the navigational instructions, the navigational instructions including directions for following a route from the starting point to the destination point and representations of photographs of geographic locations along the route, the navigational instructions being transmitted in a sequence in accordance with travel along the route,

a storage device having stored therein geographical information, photographic information, route processing instructions and photograph matching instructions, the photographic information including representations of photographs of actual geographic locations and the photograph matching instructions being instructions for matching a particular photograph with a corresponding geographic location, and

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a first processor, connected to said storage device 201  
and communicating therewith, for processing the location  
information and the geographical information in accordance  
with the route processing instructions to obtain a route for  
travel to the destination point, and for matching geographic  
locations along the route with representations of photographs  
thereof in accordance with the photograph matching  
instructions, thereby determining the navigational  
instructions for traveling the route including  
representations of photographs; and

a second device including 10 ✓

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a second communication port for transmitting the  
signals representing the location information, and for  
receiving the navigational instructions,

an input device for inputting the location  
information,

an output device for outputting the navigational  
instructions, and

a second processor for receiving the location  
information from said input device, for processing the  
location information for transmission by said second  
communication port, and for processing the navigational  
instructions for output by said output device.

14. A system according to claim 13, wherein said second  
device is installed in a vehicle.

15. A system according to claim 13, wherein said second  
device further includes a device for automatically  
determining the starting point.

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16. A method of providing navigational instructions, the  
method comprising the steps of:

providing a first database having geographical  
information;

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providing a second database having photographic information including representations of photographs of actual geographic locations;

matching each of the representations of photographs in the second database with the geographical information in the first database, so that a given photograph has associated therewith the geographical information regarding the location depicted in the photograph;

inputting location information using an input device, the location information including a starting point and a destination point;

transmitting signals representing the location information to a processor using a communication port;

receiving the signals representing the location information for processing by the processor;

processing the location information, the geographic information from the first database, and the photographic information from the second database using the processor, to determine a route for travel to the destination point;

generating navigational instructions for traveling the route including representations of photographs, to provide a user with a sequence of directions and photographic representations of geographic locations along the route;

transmitting the navigational instructions;

receiving the navigational instructions using the communication port; and

outputting the navigational instructions in said sequence using an output device.

17. A method according to claim 16, wherein the navigational instructions are outputted to an operator of a vehicle.

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~~18. A method according to claim 7, further comprising the step of automatically determining the starting point using a positioning device.~~

19. A system for providing navigational instructions, the system comprising:

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a communications port for receiving location information, the location information including a starting point and a destination point, and for formatting the location information;

a storage device having a database containing representations of photographs and associated geographic data; and

a processor, connected to said communications port and to said storage device, for receiving the location information formatted by said communications port, accessing the database to extract geographic data and representations of photographs associated therewith, processing the geographic data and location information to generate a route for travel to the destination point, assembling navigational instructions in a sequence for traveling the route, and outputting the navigational instructions,

wherein the navigational instructions include representations of photographs of geographical locations along the route.

20. A method of providing navigational instructions, the method comprising the steps of:

acquiring photographs of geographic locations;

associating with each of the photographs geographical information regarding the location depicted in the photograph;

storing in a database a representation of each of the photographs and the geographical information associated therewith;

receiving location information, the location information including a starting point and a destination point;



accessing the database to extract geographical information and representations of photographs associated therewith;

processing the geographical information and location information to generate a route for travel to the destination point;

assembling navigational instructions in a sequence for traveling the route; and

outputting the navigational instructions, wherein the navigational instructions include representations of photographs of geographical locations along the route.

21. A computer readable medium in which is stored a database having geographical information and photographic information, the photographic information including representations of photographs of geographic locations and associated geographical information, and computer readable code to be executed by a computer, said computer readable code performing a method of providing navigational instructions, the method comprising the steps of:

receiving location information, the location information including a starting point and a destination point;

accessing the database to extract geographical information and representations of photographs associated therewith;

processing the geographical information and location information to generate a route for travel to the destination point;

assembling navigational instructions in a sequence for traveling the route; and

outputting the navigational instructions, wherein the navigational instructions include representations of photographs of geographical locations along the route.